SPIRIT FITNESS

A Heritage of Quality | The Spirit of Innovation

CT850 Treadmill
OWNER'S MANUAL

Please carefully read this entire manual before operating your new treadmill

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Important Safety Instructions

***WARNING* - Read all instructions before using this appliance.**
***DANGER* - To reduce the risk of electric shock disconnect your SPIRIT treadmill from the electrical outlet prior to cleaning and/or service work.**
***WARNING* - To reduce the risk of burns, fire, electric shock, or injury to persons, install the treadmill on a flat level surface with access to a 220-volt AC, 15-Amp. grounded outlet. With only the treadmill plugged into the circuit.**

DO NOT USE AN EXTENSION CORD UNLESS IT IS 14AWG OR LARGER, WITH ONLY ONE OUTLET ON THE END. The treadmill should be the only appliance in the electrical circuit. DO NOT ATTEMPT TO DISABLE THE GROUNDED PLUG BY USING IMPROPER ADAPTERS, OR IN ANY WAY MODIFY THE CORD SET. A serious shock or fire hazard may result along with computer malfunctions.

- Do not operate treadmill on deeply padded, plush or shag carpet. Damage to both carpet and treadmill may result.
- Do not block the rear of the treadmill. Provide a minimum of 1 meter clearance between the rear of the treadmill and any fixed object.
- Keep children away from the treadmill. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the treadmill if it has a damaged cord or plug. If the treadmill is not working properly, call your dealer.
- Keep the mains cord away from heated surfaces.
- Do not operate where aerosol spray products are being used or where oxygen is being administered. Sparks from the motor may ignite a highly gaseous environment.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- To disconnect, turn all controls to the off position, remove tether cord, then remove the plug from the outlet.
- Do not attempt to use your treadmill for any purpose other than for the purpose it is intended.
- The pulse sensors are not medical devices. Various factors, including the user's movement, may affect the accuracy of heart rate readings. The pulse sensors are intended only as exercise aids in determining heart rate trends in general.
- Use handrails provided; they are for your safety.
- Wear proper shoes. High heels, dress shoes, sandals or bare feet are not suitable for use on your treadmill. Quality athletic shoes are recommended to avoid leg fatigue.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Do not modify the plug provided with the product if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

Remove tether cord after use to prevent unauthorized treadmill operation.
SAVE THESE INSTRUCTIONS - THINK SAFETY!

Important Electrical Information

WARNING!

NEVER use a RCD - Residual Current Device (U.S. ver.= GFCI) - wall outlet with this treadmill. As with any appliance with a large motor, the RCD/GFCI will trip often. Route the power mains cord away from any moving part of the treadmill including the elevation mechanism and transport wheels.

NEVER remove any cover without first disconnecting AC power. If voltage varies by ten percent (10%) or more, the performance of your treadmill may be affected. **Such conditions are not covered under your warranty.** If you suspect the voltage is low, contact your local power company or a licensed electrician for proper testing.

NEVER expose this treadmill to rain or moisture. This product is **NOT** designed for use outdoors, near a pool or spa, or in any other high humidity environment. The temperature specification is 40 degrees c, and humidity is 95%, non-condensing (no water drops forming on surfaces).

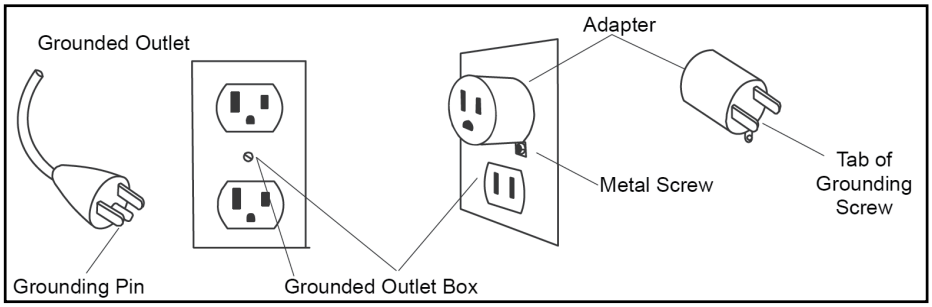
Circuit breakers: Some circuit breakers used in homes are not rated for high inrush currents that can occur when a treadmill is first turned on or even during normal use. If your treadmill is tripping the circuit breaker (even though it is the proper current rating and the treadmill is the only appliance on the circuit) but the circuit breaker on the treadmill itself does not trip, you will need to replace the breaker with a high inrush type. This is not a warranty defect. This is a condition we as a manufacture have no ability to control. This part is available through most electrical supply stores.

Grounding Instructions

This product must be grounded. If the treadmill's electrical system should malfunction or breakdown grounding provides a path of least resistance for electric current, reducing the risk of electric shock. This product is equipped with a cord having an equipment-grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

This product is for use on a nominal 220-volt circuit, and has a grounding plug that looks like the plug illustrated below. A temporary adapter that looks like the adapter illustrated below may be used to connect this plug to a 2-pole receptacle as shown below if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet, (shown below) can be installed by a qualified electrician. The green colored rigid ear-lug, or the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw.



Important Operation Instructions

- **NEVER** operate this treadmill without reading and completely understanding the results of any operational change you request from the computer.
- Understand that changes in speed and incline do not occur immediately. Set your desired speed on the computer console and release the adjustment key. The computer will obey the command gradually.
- **NEVER** use your treadmill during an electrical storm. Surges may occur in your household power supply that could damage treadmill components.
- Use caution while participating in other activities while walking on your treadmill; such as watching television, reading, etc. These distractions may cause you to lose balance or stray from walking in the center of the belt; which may result in serious injury.
- **NEVER** mount or dismount the treadmill while the belt is moving. SPIRIT treadmills start with at a very low speed and it is unnecessary to straddle the belt during start up. Simply standing on the belt during slow acceleration is proper after you have learned to operate the unit.
  Always hold on to a handrail or hand bar while making control changes (incline, speed, etc.).
  Do not use excessive pressure on console control keys. They are precision set to function properly with little finger pressure. Pushing harder is not going to make the unit go faster or slower. If you feel the buttons are not functioning properly with normal pressure contact your SPIRIT dealer.

Safety Tether Cord

A safety tether cord is provided with this unit. It is a simple magnetic design that should be used at all times. It is for your safety should you fall or move too far back on the tread-belt.
Pulling this safety tether cord will stop tread-belt movement.

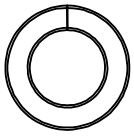
To Use:

1. Place the magnet into position on the console control head. Your treadmill will not start and operate without this.

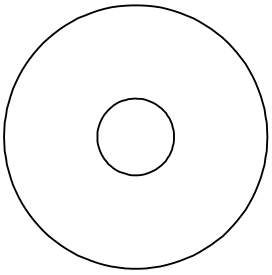
2. Fasten the plastic clip onto your clothing securely to assure good holding power. **Note:** The magnet has strong enough power to minimize accidental, unexpected stopping. The clip should be attached securely to make certain it does not come off. Be familiar with its function and limitations. The treadmill will stop, depending on speed, with a one to two step coast anytime the magnet is pulled off the console. Use the red Stop / Pause switch in normal operation.

Assembly Pack Check List

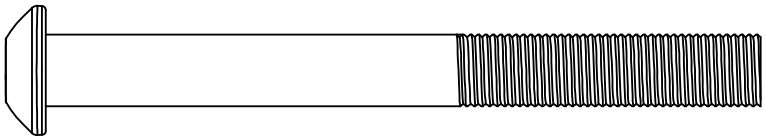
Step1



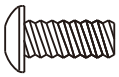
#117 - 3/8" x16.5 x2.0T x4H
Split Washer (6 pcs)



#116 - ϕ 3/8" x 35 x 2T
Flat Washer (6 pcs)

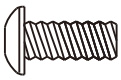


#144 - 3/8”-16 x 3”
Button Head Socket Bolt (6 pcs)



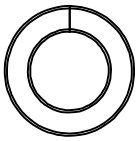
#134 - M5 x 12mm
Phillips Head Screw (4 pcs)

Step2

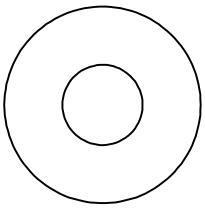


#134 - M5 x 12mm
Phillips Head Screw (4 pcs)

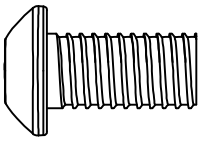
Step3



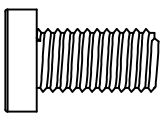
#117 - 3/8" x16.5 x2.0T x4H
Split Washer (6 pcs)



#125 - ϕ 3/8" x25 x2T
Flat Washer (6 pcs)



#145 – 3/8”-16 x3/4”
Button Head Socket Bolt (6 pcs)

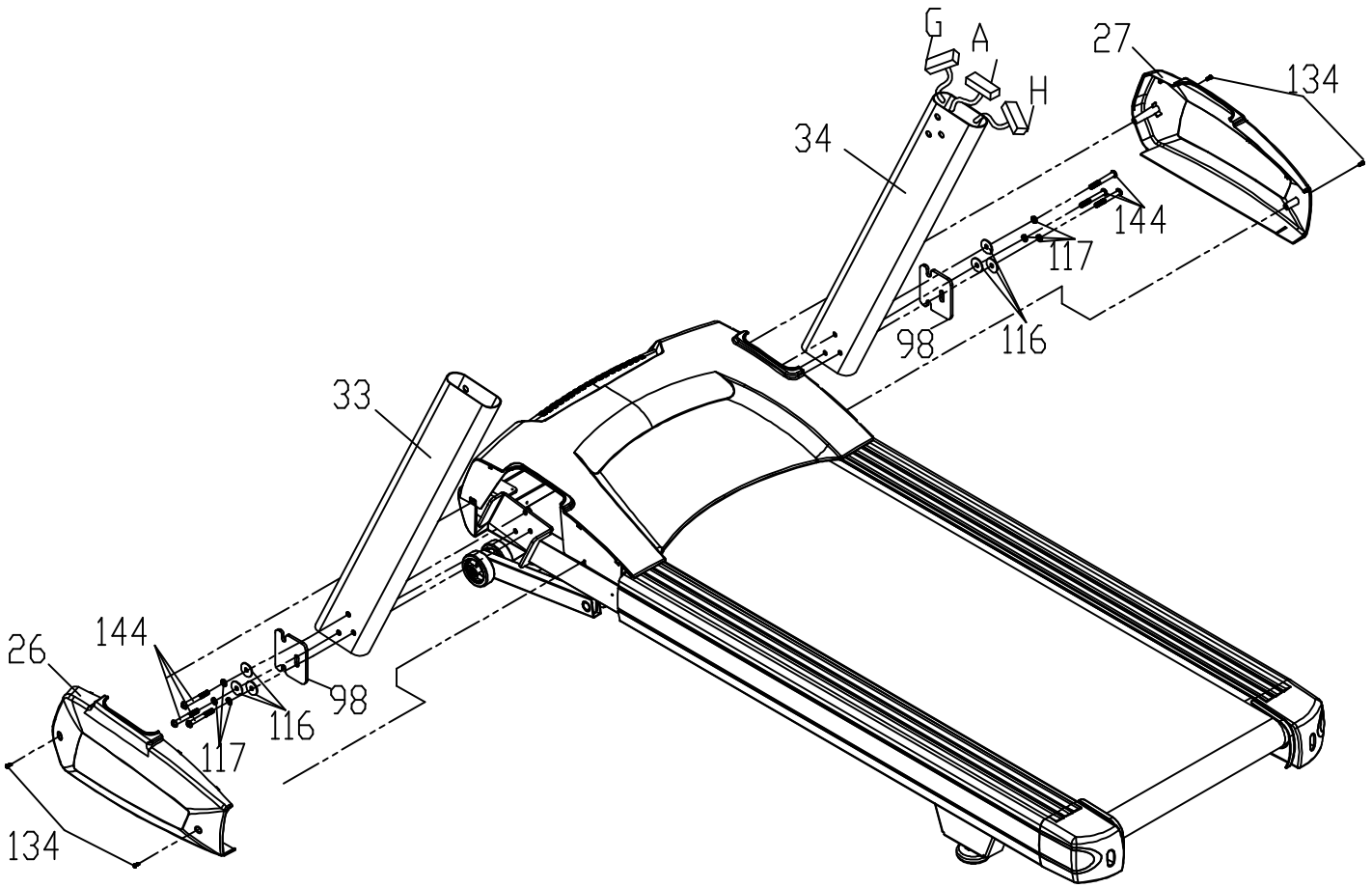


#146 – M8 x1.25x12mm
Socket Head Cap Bolt (6 pcs)

Assembly Instructions

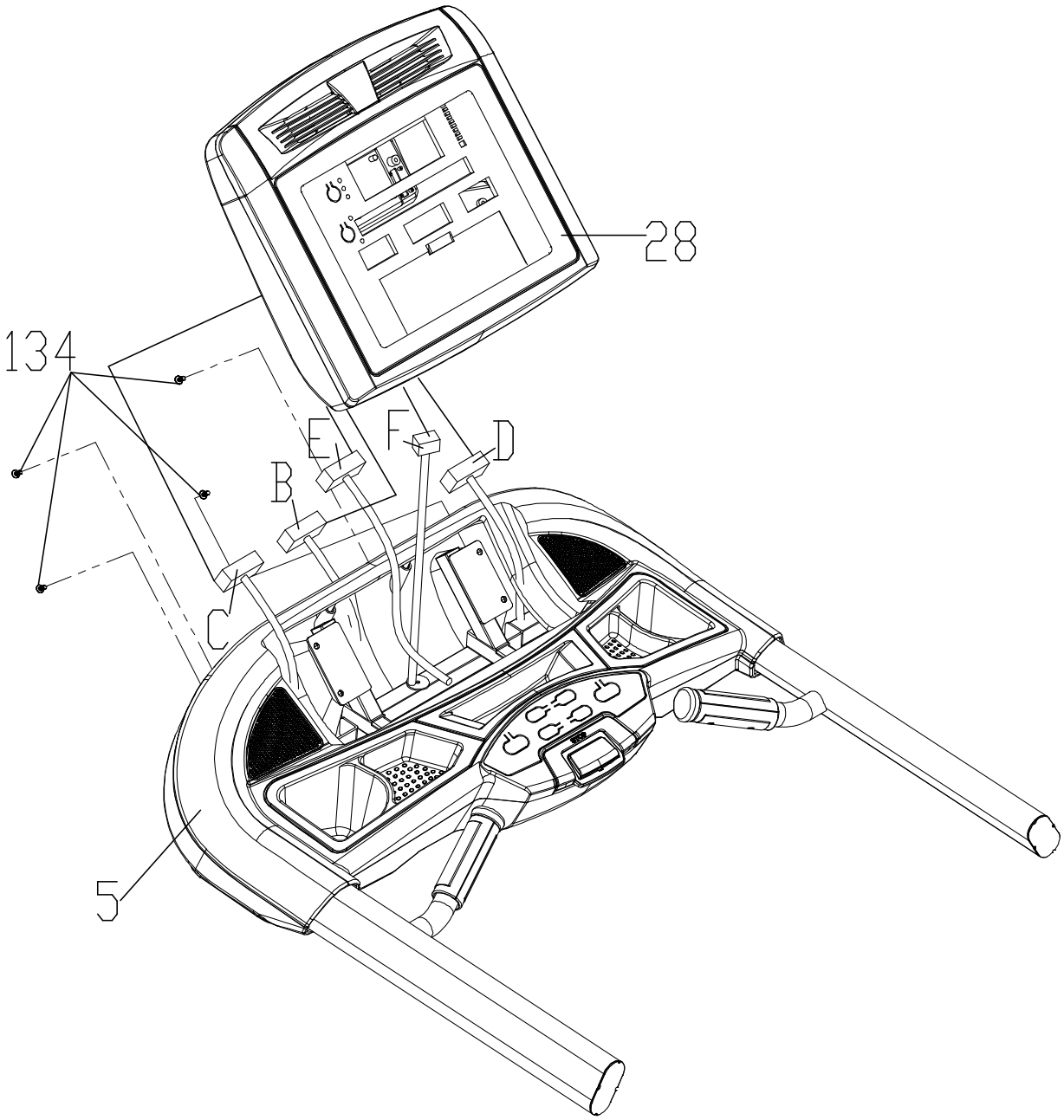
Step 1: Uprights

1. The right upright (34) is with preinstalled lower computer cable A (42). To install uprights on the frame base, special care must be taken not to pinch the computer cable between the upright and frame base. Use first 3/8"-16 × 3"_Button Head Socket Bolt (144) together with 3/8" × 16.5 × 2.0 × 4H_Split Washer (117), and 3/8" × 35 × 2T_Flat Washer (116) through the top hole in the retaining plate (98), and corresponding top hole in the upright tube, and screw into the base frame.Now install the other two bolts 3/8"-16 × 3"_Button Head Socket Bolt (144) together with 3/8" × 16.5 × 2.0 × 4H_Split Washer (117), and 3/8" × 35 × 2T_Flat Washer (116) and tighten all three bolts up.
2. Same as the above step to install left upright (33).
3. Use four M5 × 12L_Phillips Head Screws (134) install left and right motor base cap (26, 27).



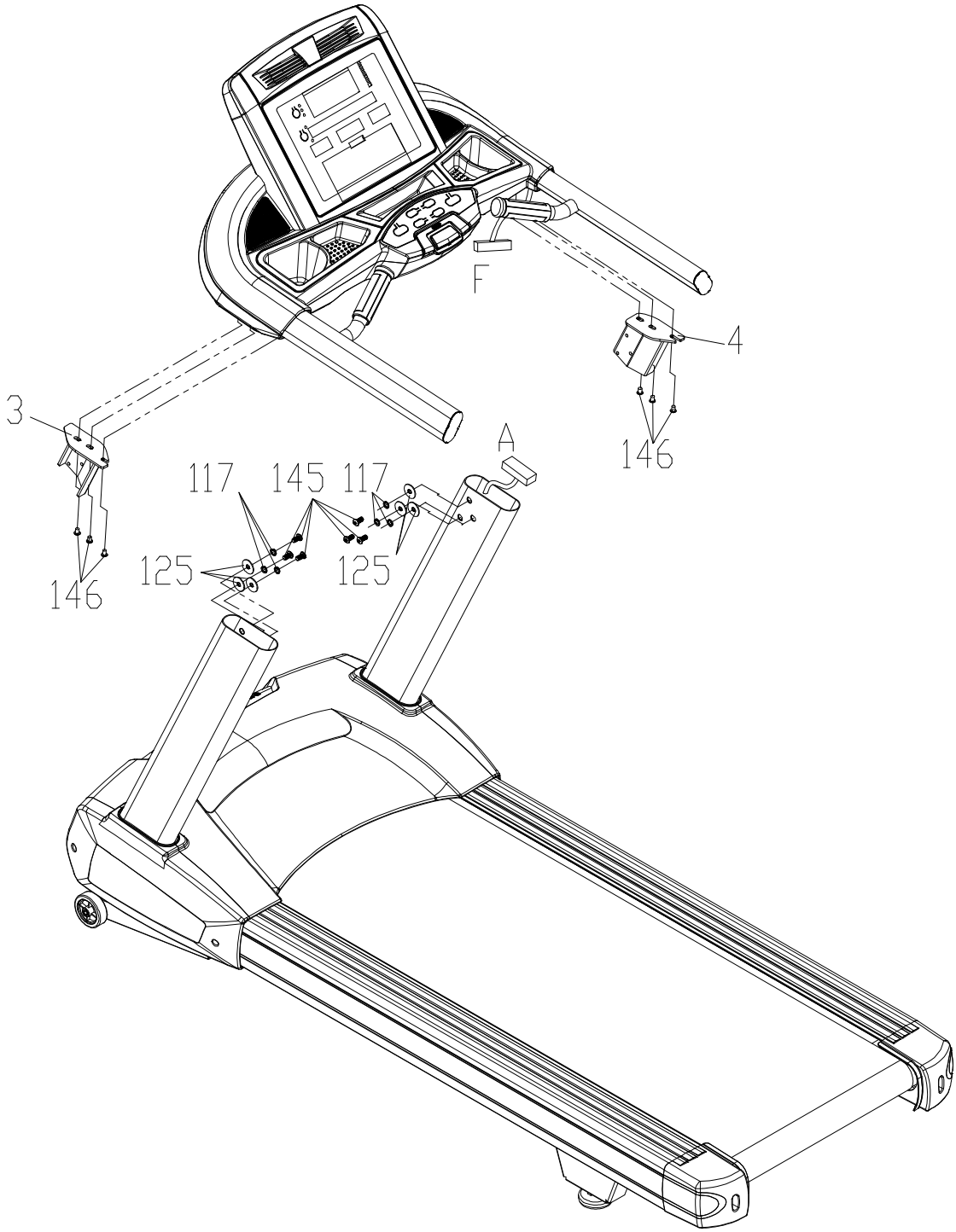
Step 2: Installing the console

1. Connect upper computer cable B (41), hand pulse assembly C (37), D (38), touch pad/backlit cable E (43) and ground wire F (35) all connect to the board on back of the console (28).
2. Use four M5 × 12L_Phillips Head Screws (134) to secure console assembly onto the console support (5).



Step 3: Installing console onto uprights

1. Use six M8 × 1.25 × 12L_Socket Head Cap Bolts (146) to secure the console on interface mounting bracket on uprights (3, 4).
2. Connect upper computer cable F (41) and lower computer cable A (42).
3. Use six 3/8"-16 × 3/4"_Button Head Socket Bolts (145), together with six 3/8" × 16.5 × 2.0 × 4H_Split Washers (117) and six 3/8" × 25 × 2T_Flat Washers (125) on top of uprights. Be careful not to pinch the computer cable.



Operation of Your Treadmill

Getting familiar with the control panel

■ Console

Getting Started:

Power the treadmill on by plugging it into an appropriate wall outlet, then turn on the power switch located at the front of the treadmill below the motor hood. Ensure that the safety key is installed, as the treadmill will not power on without it.

When the power is turned on, all the lights on the display will light for a short time. Then the **Time** and **Distance** windows will display Odometer readings for a short time. The **Time** window will show how many hours the treadmill has been in use and the **Distance** window will show how many Kilometers (or Miles if the treadmill is set to English readings; see maintenance for changing settings) the treadmill has gone. A message will be displayed showing the current software version. The treadmill will then enter idle mode, which is the starting point for operation.

Quick-Start Operation:

- Press and release the **START** key to **begin belt movement** at 0.5 mph/0.8 kph, then adjust to the desired speed using the **FAST** keys.
- To slow tread-belt using the **SLOW** key to the desired speed.
- To stop the tread-belt press and release **STOP** key.

TREADMILL FEATURES:

Pause/Stop/Reset:

- When the treadmill is running the pause feature may be utilized by pressing the **STOP** key once. This will slowly decelerate the tread-belt to a stop. The incline stays at that level and Time, Distance and Calorie readings will hold while the unit is in the pause mode. After 5 minutes the display will reset and return to the start up screen.
- To resume your exercise with previous speed and incline settings when in Pause mode, press the **START** key.
- Pressing the **STOP** key twice will end the program and a workout summary will be displayed. If the **STOP** button is pressed a third time, the console will return to the idle mode (start up) screen.
- If the **STOP** button is held down for more than 3 seconds the console will reset.
- When you are setting data, such as age and time, for a program pressing the **STOP** key will allow you to go back one step for each key press.

Incline:

- Incline may be adjusted anytime after the belt starts moving.
- Press and hold the **UP** or **DOWN** keys to achieve desired level of effort.

Dot Matrix Center Display:

Ten rows of dots indicate each level of a workout in manual mode. The dots are only to show an approximate level (speed/incline) of effort. They do not necessarily indicate a specific value - only an approximate percent to compare levels of intensity. In Manual Operation the Speed / Incline dot matrix window will build a profile “picture” as values are changed during a workout. There are twenty-four columns, indicating time. The 24 columns are divided into $1/24^{th}$ of the total time of the program. When the time is counting up from zero (as in quick start) each column represents 1 minute.

Next to the Dot Matrix window are three LED lights labeled: Track, Speed and Incline, along with a **DISPLAY** button. When the Track LED is lit the dot matrix displays the Track profile, when the Speed LED is lit the Dot matrix displays the Speed profile and when the Incline LED is lit the Dot Matrix displays the Incline profile. You may change the Dot Matrix profile view by pressing the **DISPLAY** button. After scrolling through the three profiles the Dot matrix will automatically scroll through the three displays showing each one for four seconds. The LED associated with each profile will blink while that view is displayed. One more press of the **DISPLAY** button will return you to the Track profile.

0.4 km Track:

The 0.4km track (1/4 mile) will be displayed around the dot matrix window. The flashing dot indicates your progress. In the center of the track there is a lap counter for reference.

Heart Rate Feature:

The Pulse (Heart Rate) window will display your current heart rate in beats per minute during the workout. You must use both left and right stainless steel sensors to pick up your pulse. Pulse values are displayed anytime the computer is receiving a Grip Pulse signal. You may use the Grip Pulse feature while in Heart Rate Control. The TREADMILL will also pick up wireless heart rate transmitters that are Polar compatible, including coded transmissions.

Heart Rate Bar Graph:

Displays a graphical representation of your heart rate as a percentage of your maximum heart rate. When you enter your age during programming, the console will calculate your maximum heart rate then light up the graph to show the percent of maximum heart rate you are currently achieving.

Message Window Display:

Displays messages that help guide you through the programming process. During a program the message window displays your workout data.

To Turn Treadmill Off:

The display will automatically turn off (go to sleep) after 30 minutes of inactivity. This function is called sleep mode. In sleep mode, the treadmill will power down most everything except for a minimum of circuitry for detecting key presses and the safety key so it will start up again if these are activated. There is only a tiny amount of current used in sleep mode (about the same as your TV when it is turned off) and it is perfectly fine to leave the main power switch on in sleep mode. Of course you may also remove the safety key or turn off the main power switch to power down the treadmill.

MP3(LINE-IN) inputs are shown on the panel below. You can plug in the player into the jack(♫) on the panel or plug in the earphone into phone jack(🎧) to enjoy the music. When phone jack is plugged in, there is no output with the speaker.

Programmable Features

The New TREADMILL offers twelve preset programs, HILL, FAT BURN, CARDIO, CALORIE, INTERVAL, STRENGTH, 5K RUN, 10K RUN, HR 1, HR 2, CUSTOM, a Gerkin protocol based Fitness Test and one Manual program.

Preset Features:

To choose and start preset program:

- Select a program then press the **ENTER** key to begin customizing the program with your personal data, or just press the start key to begin the program with the default settings.

- After selecting a program and pressing **ENTER** to set your personal data, the **Time** window will blink with the default value of 20 minutes. You may use any of the **UP**/ **DOWN**/ **FAST**/ **SLOW** keys to adjust the time. After adjusting the time, press **ENTER**. (Note: Except for program CALORIE, You may press **START** at any time during the programming to begin with only settings you have modified at that point).

- The **Incline** window will now be blinking a value indicating your **Age**. Entering the correct Age will affect the Heart rate bar graph accuracy and also needed for the HR programs. Use the **UP**/ **DOWN**/ **FAST**/ **SLOW** keys to adjust, you can also use numeric keypads 0~9 on the console to make adjustments, and then press **ENTER**.

- The **Incline** window will now be blinking a value indicating your **Bodyweight.** Entering your correct bodyweight affects the Kcal readout accuracy. Use **UP**/ **DOWN**/ **FAST**/ **SLOW** keys to adjust, you can also use numeric keypads 0~9 on the console to make adjustments, and then press **ENTER**.

- The **Speed** window will now be blinking, showing the preset top speed of the selected program. Use **UP**/ **DOWN**/ **FAST**/ **SLOW** keys or numeric keys to adjust, you can also use numeric keypads 0~9 on the console to make adjustments, and then press **ENTER**. Each program has various speed changes throughout; this allows you to limit the highest speed the program will attain during your workout.

- Now press the **START** key to begin your workout.

- There will be a 3 minute warm-up to begin. You can press the **START** button to bypass this and go straight to the workout. During the warm-up the clock will count down from 3 minutes. (5K RUN、10K RUN、HR 1、HR 2 、CUSTOM and the manual program don't have a warm-up mode.)

Preset programs speed and incline settings

The preset program speed and incline levels are shown in the chart below. The Speed numbers shown in the chart indicate a percentage of the top speed of the program. For instance, the first Speed setting for P1 (Program 1, HILL) shows the number 20. This means that this segment of the program will have a speed that is 20% of the top speed for the program (The user sets the top speed in the procedure above). If the user sets the top speed to 10 mph, then the first segment will be 2 mph. You will notice that segment 12 shows 100 which means, the speed will be set to 100% of 10 mph or simply 10 mph.

Prog	SEG	Warm up			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Cool down		
P1	Speed	20	30	40	50	60	60	70	70	70	80	80	70	80	80	100	100	70	80	80	70	70	80	80	70	60	60	50	40	30	20
	Incline	0	0	0	0	1	2	3	3	4	3	3	4	4	5	3	3	4	3	3	4	4	5	4	3	1	1	0	0	0	0
P2	Speed	20	30	40	50	60	60	70	80	100	100	100	100	100	100	100	100	100	100	100	100	100	100	80	70	60	50	40	30	20	
	Incline	0	0	0	0	1	2	3	3	3	4	5	3	3	4	4	3	3	2	2	3	4	5	6	4	2	1	0	0	0	0
P3	Speed	20	30	40	50	60	60	70	70	70	80	70	70	80	80	60	70	80	80	70	70	70	100	70	80	60	60	50	40	30	20
	Incline	0	0	0	0	1	1	1	2	2	3	2	2	3	3	1	2	3	3	2	2	4	4	2	3	1	1	0	0	0	0
P4	Speed	20	30	40	50	60	60	70	80	100	60	60	70	80	100	60	70	100	60	70	100	60	70	80	70	60	60	50	40	30	20
	Incline	0	0	0	0	1	2	3	5	6	2	3	5	6	7	2	3	7	2	3	8	2	3	5	4	3	1	0	0	0	0
P5	Speed	20	30	40	50	50	60	80	90	100	70	100	70	100	70	100	70	100	70	100	70	100	90	80	70	60	50	50	40	30	20
	Incline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P6	Speed	20	30	40	50	60	60	70	70	80	80	90	90	90	100	100	100	100	100	100	100	100	100	100	90	80	60	50	40	30	20
	Incline	0	0	0	1	1	1	4	4	4	4	4	4	5	5	5	5	5	5	5	5	3	3	3	3	3	1	1	0	0	0

P1= HILL P2= FAT BURN P3= CARDIO P4= INTERVAL P5 = CALORIE P6=STRENGTH

CALORIE Program:

- Press program button “CALORIE” to perform the program. The message window shows ”PRESS ENTER TO MODIFY”
- .Press “**ENTER**” button, the message window shows ”ADJUST AGE THEN PRESS ENTER” with the INCLINE window is blinking. After the age is set, press “**ENTER**” to continue.
- Message window is showing ”ADJUST BODY WEIGHT THEN PRESS ENTER” now with INCLINE window is blinking. After the weight is set, press “**ENTER**” button to continue.
- Message window is showing ”ADJUST TARGET CALORIES BURN THEN PRESS ENTER” and INCLINE window is blinking. After setting target CALORIE, press “**ENTER**” button to continue.
- Message window now is showing ”ADJUST MAX. SPEED THEN PRESS ENTER” with SPEED window is blinking. After max. speed is set, press “**ENTER**” button to continue.
- Message window now is showing . ”ADJUST MAX. INCLINE THEN PRESS ENTER” and INCLINE window is blinking. After max. incline is set then press “**ENTER**” button, message window shows ”PROGRAM TIME”. The console then automatically calculates the time needed and shows it on TIME window.
- Now message window is showing ”PRESS START TO BEGIN WORKOUT OR ENTER TO MODIFY”. Press “**START**” button to start the workout.

Custom Program:

- Selecting the **Custom** program button, the message window shows ”PRESS ENTER TO MODIFY OR START TO BEGIN WORKOUT”. You can either press “**ENTER**” button or press “**START**” button to begin the workout. When you press “**ENTER**” button, dot matrix window will show U1 and flashing. In the mean time, the message window will show ”PRESS 1 OR 2 TO SELECT THEN PRESS ENTER”. You can choose U1 or U2 for setting by pressing “**1**” or “**2**” button then “**ENTER**” button. Note that the dot matrix display portion will light a single row of dots at the bottom (Unless there is a previously saved program).
- After pressing “**ENTER**” button, the message window will show ”ADJUST TIME THEN PRESS ENTER” with TIME window is blinking. Use the **UP/DOWN/FAST/SLOW or numeric keypads** to adjust and set the program for the desired time. Press the **ENTER** key. This is a must to continue even if the time is not adjusted.
- Now the message window is showing ”ADJUST AGE THEN PRESS ENTER”. The **Incline** window will now be blinking a value indicating your **Age**. Entering the correct Age will affect the Heart rate bar graph accuracy. Use **UP/DOWN/FAST/SLOW** keys or numeric keys to adjust and then press **ENTER** key.
- Now the message window is showing ”ADJUST BODY WEIGHT THEN PRESS ENTER”. The **Incline** window will now be blinking a value indicating your **Bodyweight.** Entering your correct bodyweight affects the Kcal readout accuracy. Use **UP/DOWN/FAST/SLOW** keys or numeric keys to adjust, and then press **ENTER** key.
- Now the message window is showing ”ADJUST SPEED THEN PRESS ENTER”. The first speed setting column (segment) will now be blinking and SPEED is blinking too. To set the speed value you want, use **FAST** / **SLOW** keys to adjust the speed to your desired effort level for the first segment then press **ENTER**. The second column will now be blinking. Note that the previous segment value has been carried over to the new segment. Repeat the above process until all segments have been programmed.
- Now the message window is showing ”ADJUST INCLINE THEN PRESS ENTER”. The first column will be blinking again and INCLINE window is blinking too. The console is now ready for the incline settings. To set the incline value you want, Use **UP/DOWN/FAST/SLOW** keys to adjust the incline to your desired effort level for the first segment then press **ENTER.** Repeat the same process used to set the speed values for programming the segments for incline.
- When the setting is completed, the message window will show ”PRESS START TO BEGIN WORKOUT OR ENTER TO MODIFY” .Press the **START** button to begin the workout and also save the program to memory.

5 Km and 10Km Run:

This program automatically sets a 5K or 10K (5 or 10 kilometer) distance as your goal. The track display will show one loop that is the equivalent of 5 or 10 kilometers and the Distance window will also show 5K or 10K to start. When the program begins the Distance will count down; once it reaches zero the program ends.

*Please note that the Speed readout is in MPH if the console is not set to Metric readings.

Fitness Test:

The fitness test is based on the Gerkin protocol, also known as the fireman's protocol, and is a submax Vo2 (volume of oxygen) test. The test will increase speed and elevation alternately until you reach 85% of your Target heart rate (THR). THR=(220-AGE)x0.85 The time it takes for you to reach THR determines the test score as shown in the chart below.

Stage	Time	Speed	Grade	VO2 Max
1	0 to 1:00	7.2KPH	0%	31.15
2.1	**1:00**	7.2KPH	2%	32.55
2.2	1:30	7.2KPH	2%	33.6
2.3	1:45	7.2KPH	2%	34.65
2.4	2:00	8.0KPH	2%	35.35
3.1	2:15	8.0KPH	2%	37.45
3.2	2:30	8.0KPH	2%	39.55
3.3	2:45	8.0KPH	2%	41.3
3.4	3:00	8.0KPH	4%	43.4
4.1	3:15	8.0KPH	4%	44.1
4.2	3:30	8.0KPH	4%	45.15
4.3	3:45	8.0KPH	4%	46.2
4.4	4:00	8.8KPH	4%	46.5
5.1	4:15	8.8KPH	4%	48.6
5.2	4:30	8.8KPH	4%	50
5.3	4:45	8.8KPH	4%	51.4
5.4	5:00	8.8KPH	6%	52.8
6.1	5:15	8.8KPH	6%	53.9
6.2	5:30	8.8KPH	6%	54.9
6.3	5:45	8.8KPH	6%	56
6.4	6:00	9.6KPH	6%	57
7.1	6:15	9.6KPH	6%	57.7
7.2	6:30	9.6KPH	6%	58.8
7.3	6:45	9.6KPH	6%	60.2
7.4	7:00	9.6KPH	8%	61.2
8.1	7:15	9.6KPH	8%	62.3
8.2	7:30	9.6KPH	8%	63.3
8.3	7:45	9.6KPH	8%	64
8.4	8:00	10.4KPH	8%	65
9.1	8:15	10.4KPH	8%	66.5
9.2	8:30	10.4KPH	8%	68.2
9.3	8:45	10.4KPH	8%	69
9.4	9:00	10.4KPH	10%	70.7
10.1	9:15	10.4KPH	10%	72.1
10.2	9:30	10.4KPH	10%	73.1
10.3	9:45	10.4KPH	10%	73.8
10.4	10:00	11.2KPH	10%	74.9
11.1	10:15	11.2KPH	10%	76.3
11.2	10:30	11.2KPH	10%	77.7
11.3	10:45	11.2KPH	10%	79.1
11.4	11:00	11.2KPH	10%	80

Stage	Time	Speed	Grade	VO2 Max
1	0 to 1:00	4.5MPH	0	31.15
2.1	**1:00**	4.5MPH	2	32.55
2.2	1:30	4.5MPH	2	33.6
2.3	1:45	4.5MPH	2	34.65
2.4	2:00	5.0MPH	2	35.35
3.1	2:15	5.0MPH	2	37.45
3.2	2:30	5.0MPH	2	39.55
3.3	2:45	5.0MPH	2	41.3
3.4	3:00	5.0MPH	4	43.4
4.1	3:15	5.0MPH	4	44.1
4.2	3:30	5.0MPH	4	45.15
4.3	3:45	5.0MPH	4	46.2
4.4	4:00	5.5MPH	4	46.5
5.1	4:15	5.5MPH	4	48.6
5.2	4:30	5.5MPH	4	50
5.3	4:45	5.5MPH	4	51.4
5.4	5:00	5.5MPH	6	52.8
6.1	5:15	5.5MPH	6	53.9
6.2	5:30	5.5MPH	6	54.9
6.3	5:45	5.5MPH	6	56
6.4	6:00	6.0MPH	6	57
7.1	6:15	6.0MPH	6	57.7
7.2	6:30	6.0MPH	6	58.8
7.3	6:45	6.0MPH	6	60.2
7.4	7:00	6.0MPH	8	61.2
8.1	7:15	6.0MPH	8	62.3
8.2	7:30	6.0MPH	8	63.3
8.3	7:45	6.0MPH	8	64
8.4	8:00	6.5MPH	8	65
9.1	8:15	6.5MPH	8	66.5
9.2	8:30	6.5MPH	8	68.2
9.3	8:45	6.5MPH	8	69
9.4	9:00	6.5MPH	10	70.7
10.1	9:15	6.5MPH	10	72.1
10.2	9:30	6.5MPH	10	73.1
10.3	9:45	6.5MPH	10	73.8
10.4	10:00	7.0MPH	10	74.9
11.1	10:15	7.0MPH	10	76.3
11.2	10:30	7.0MPH	10	77.7
11.3	10:45	7.0MPH	10	79.1
11.4	11:00	7.0MPH	10	80

Before the test:

- Make sure you are in good health; check with your physician before performing any exercise if you are over the age of 35 or persons with pre-existing health conditions.
- Make sure you have warmed up and stretched before taking the test.
- Do not take in caffeine before the test.
- If using the hand pulse sensors hold the hand grips gently, do not tense up.

Fitness test programming:

1. Press the **Fitness-test** button and press **ENTER**.
2. The message window will ask you to enter your **Age**. You may adjust the age setting by using **UP**/ **DOWN**/ **FAST**/ **SLOW** keys or numeric keys, with the adjustment shown in the Incline window, then press the **ENTER** key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your **Weight**. You may adjust the weight setting by using **UP**/ **DOWN**/ **FAST**/ **SLOW** keys or numeric keys, with the adjustment shown in the INCLINE window, then press **ENTER** to continue.
4. Now press **START** to begin the test.

During the test:

- The console must be receiving a steady heart rate for the test to begin. You may use the hand pulse sensors or wear a heart rate chest strap transmitter.
- The test will start with a 3 minute warm-up at 5kph (3mph) before the actual test begins.
- The data shown during the test is:
    a. **Time** indicates total elapsed time
    b. **Incline** in percent grade
    c. **Distance** in Miles or Kilometers depending on preset parameter.
    d. **Speed** in MPH or KPH depending on preset parameter.
    e. **Target** Heart Rate and **Actual** Heart Rate are shown in the message window.

After the test:

- Cool down for about one to three minutes.
- Take note of your score because the console will automatically return to the start-up mode after a few minutes.

What your score means:

VO2max for male and fitted female

	18-25 years old	26-35 years old	36-45 years old	46-55 years old	56-65 years old	65+ years old
excellent	>60	>56	>51	>45	>41	>37
good	52-60	49-56	43-51	39-45	36-41	33-37
above average	47-51	43-48	39-42	35-38	32-35	29-32
average	42-46	40-42	35-38	32-35	30-31	26-28
below average	37-41	35-39	31-34	29-31	26-29	22-25
poor	30-36	30-34	26-30	25-28	22-25	20-21
very poor	<30	<30	<26	<25	<22	<20

VO2max for female and non-fitted male

	18-25 years old	26-35 years old	36-45 years old	46-55 years old	56-65 years old	65+ years old
excellent	56	52	45	40	37	32
good	47-56	45-52	38-45	34-40	32-37	28-32
above average	42-46	39-44	34-37	31-33	28-31	25-27
average	38-41	35-38	31-33	28-30	25-27	22-24
below average	33-37	31-34	27-30	25-27	22-24	19-22
poor	28-32	26-30	22-26	20-24	18-21	17-18
very poor	<28	<26	<22	<20	<18	<17

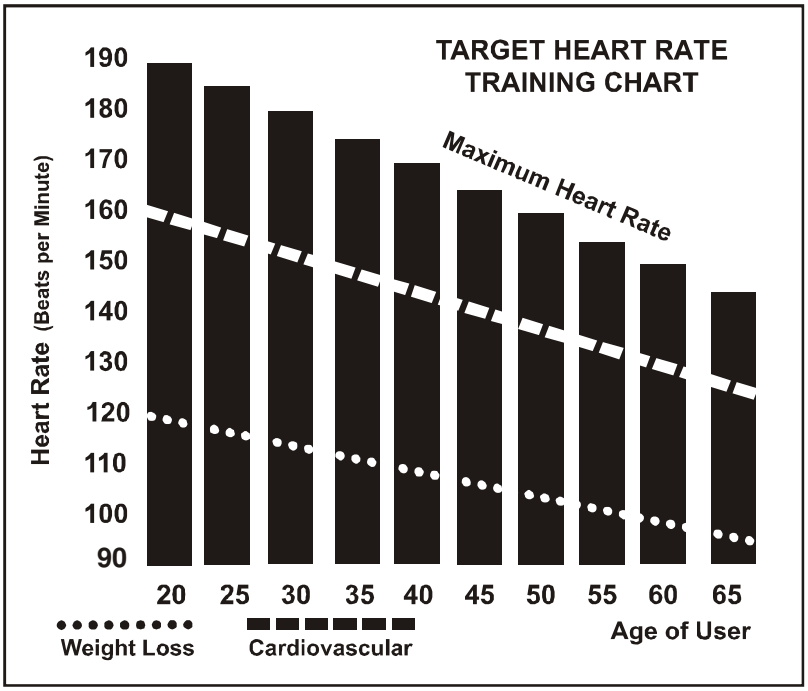
Target Heart Rate

• The old motto, “no pain, no gain”, is a myth that has been overpowered by the benefits of exercising comfortably. A great deal of this success has been promoted by the use of heart rate monitors. With the proper use of a heart rate monitor, many people find that their choice of exercise intensity is either too high or too low and exercise is much more enjoyable by maintaining their heart rate in the desired benefit range.

• To determine the benefit range in which you wish to train, you must first determine your Maximum Heart Rate, which is the highest your heart rate should go to. This can be accomplished by using the following formula:

220 - User’s Age = Maximum Heart Rate

(If you enter your age during programming of the console the console will perform this calculation automatically).



This is used for the HR control programs and also for the Heart rate bar graph. After calculating your Maximum Heart Rate, you can decide upon which goal you would like to pursue. The two most popular goals of exercise are cardiovascular fitness (training for the heart and lungs) and weight control. The black columns on the chart above represent the Maximum Heart Rate for a person whose age is listed at the bottom of each column. The heart rate training zone for either cardiovascular fitness or weight loss is represented by two different lines, which cut diagonally through the chart. A definition of the lines’ goal is in the bottom left-hand corner of the chart. If your goal is cardiovascular fitness or if it is weight loss, it can be achieved by training at 80% or 60%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your physician before participating in any exercise program.

With all SPIRIT Heart Rate Control treadmills, you may use the heart rate monitor feature without using the Heart Rate Control program. This function can be used during any of the different programs. The Heart Rate Control program automatically controls incline.

CAUTION!

The target value used in HR-1 and HR-2 programs is a suggestion only for normal, healthy individuals. Do not exceed your limits! You may not be able to obtain your chosen target. If in question, enter a higher age value that will set a lower target goal.

Using a Heart Rate Transmitter (Optional)

How to wear your wireless chest strap transmitter:

1. Attach the transmitter to the elastic strap using the locking parts.
2. Adjust the strap as tightly as possible as long as the strap is not too tight to remain comfortable.
3. Position the transmitter with the logo centered in the middle of your body facing away from your chest (some people must position the transmitter slightly left of center). Attach the final end of the elastic strap by inserting the round end and, using the locking parts, secure the transmitter and strap around your chest.
4. Position the transmitter immediately below the pectoral muscles.
5. Sweat is the best conductor to measure very minute heart beat electrical signals. However, plain water can also be used to pre-wet the electrodes (2 black square areas on the reverse side of the belt and either side of transmitter). It's also recommended that you wear the transmitter strap a few minutes before your work out. Some users, because of body chemistry, have a more difficult time in achieving a strong, steady signal at the beginning. After "warming up", this problem lessens. As noted, wearing clothing over the transmitter/strap doesn't affect performance.
6. Your workout must be within range - distance between transmitter/receiver – to achieve a strong steady signal. The length of range may vary somewhat but generally stay close enough to the console to maintain good, strong, reliable readings. Wearing the transmitter immediately against bare skin assures you of proper operation. If you wish, you may wear the transmitter over a shirt. To do so, moisten the areas of the shirt that the electrodes will rest upon.

Erratic Operation:

Caution! Do not use this treadmill for Heart Rate Control unless a steady, solid Actual Heart Rate value is being displayed. High, wild, random numbers being displayed indicate a problem.

Areas to look for on interference:

(1) Treadmill not properly grounded - **A must!**
(2) Microwave ovens, TV's, small appliances, etc.
(3) Fluorescent lights.
(4) Some household security systems.
(5) Perimeter fence for a pet.
(6) The antenna that picks up your heart rate is very sensitive. If there is an outside noise source, turning the whole machine 90 degrees may de-tune the interference.
(7) If you continue to experience problems contact your dealer.

WARNING!
DO NOT USE THE HEART RATE CONTROL PROGRAM IF YOUR HEART RATE IS NOT REGISTERING PROPERLY ON THE TREADMILL'S DISPLAY!

Heart Rate Control

How the Heart Rate Control Program Works:
Heart Rate Control (HRC) uses your treadmill's incline system to adjust your heart rate. Increases and decreases in elevation affect heart rate much more efficiently than changes in speed alone. The HRC program automatically changes elevation gradually to achieve the programmed target heart rate.

Selecting a Heart Rate Control Program:
You have the option, during the setup mode, to choose either the Weight Control (HR-1) program or the Cardiovascular (HR-2) program. The Weight Control program will maintain your heart rate at 70% of your Maximum Heart Rate. The Cardiovascular program will maintain your heart rate at 90% of your Maximum Heart Rate. Your Maximum Heart Rate is based upon a formula that subtracts your age from a constant of 220. Your HR setting is automatically calculated during the setup mode when you enter your age.

Heart Rate Control programming

- Press Program HR button to enter heart rate control program.
- Now the window will show ”PRESS ENTER TO MODIFT OR START TO BEGIN WORKOUT”. You can either press “ENTER” button for setting or press “START” button to execute the program.
- .When “ENTER” button is pressed, the message window shows ”PRESS 1 OR 2 TO SELECT THEN PRESS ENTER”. At the same time, the dot matrix window is showing “1” and you can press numeric keypad 1 or 2 and then “ENTER” button..
- Now message window is showing ”ADJUST TIME THEN PRESS ENTER” with TIME window is blinking. Use **UP**/**DOWN**/**FAST**/**SLOW** keys or numeric keys to adjust. After setting time, press “ENTER” button again.
- Now message window is showing ”ADJUST AGE THEN PRESS ENTER” with INCLINE window is blinking. Use **UP**/**DOWN**/**FAST**/**SLOW** keys or numeric keys to adjust. Adjusting age will change THR value. (as the THR formula described above).After age is set, press “ENTER” button again.
- Now message window is showing ”ADJUST BODY WEIGHT THEN PRESS ENTER” with INCLINE window is blinking. Use **UP**/**DOWN**/**FAST**/**SLOW** keys or numeric keys to adjust. After the weight is set, press “ENTER” button again..
- Now message window is showing ”ADJUST HEART RATE THEN PRESS ENTER” with SPEED window is blinking. Use **UP**/**DOWN**/**FAST**/**SLOW** keys or numeric keys to adjust. After the target heart rate value is set, Press “ENTER” button again.
- The message window is then showing ”PRESS START TO BEGIN WORKOUT OR ENTER TO MODIFY”. .Press “START” button to begin the workout.

Note：When the message window is showing ”CHECK PULSE”, there is no pulse signal received and the program can not be performed. Please check and make sure that Heart Rate strap functions normally.

General Maintenance

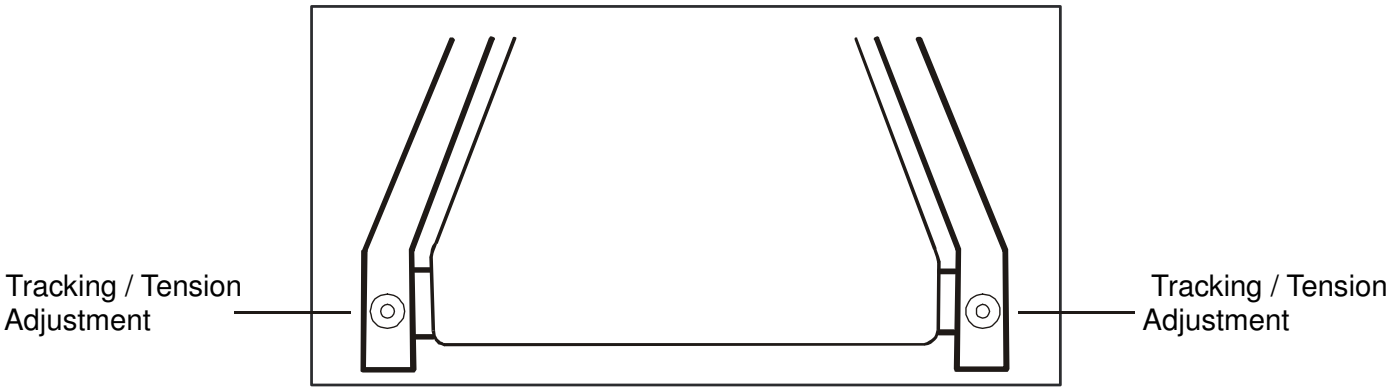
Belt and Bed - Your treadmill uses a very high-efficient low-friction bed. Performance is maximized when the bed is kept as clean as possible. Use a soft, damp cloth or paper towel to wipe the edge of the belt and the area between the belt edge and frame. Also reach as far as practical directly under the belt edge. This should be done once a month to extend belt and bed life. Use water only - no cleaners or abrasives. A mild soap and water solution along with a nylon scrub brush will clean the top of the textured belt. **Allow the belt to dry before using.**

Belt Dust - This occurs during normal break-in or until the belt stabilizes. Wiping excess off with a damp cloth will minimize buildup.

General Cleaning - Dirt, dust, and pet hair can block air inlets and accumulate on the running belt. On a monthly basis: vacuum underneath your treadmill to prevent buildup. Once a year, you should remove the black motor hood and vacuum out dirt that may accumulate. UNPLUG POWER CORD BEFORE THIS TASK.

BELT ADJUSTMENTS:

Tread-belt Tension Adjustment - Adjustment must be made from the rear roller. The adjustment bolts are located at the end of the step rails in the end caps, as noted in diagram below.



Note: *Adjustment is through small hole in the end cap.*

Tighten the rear roller bolts only enough to prevent slippage at the front roller. Turn both tread-belt tension adjustment bolts in increments of 1/4 turn each and inspect for proper tension by walking on the belt at a low speed, making sure the belt does not slip. Keep tensioning the bolts until the belt stops slipping.

- **If you feel the belt is tight enough, but it still slips, the problem may be a loose Motor drive belt under the front cover.**

DO NOT OVERTIGHTEN – Over tightening will cause belt damage and premature bearing failure.

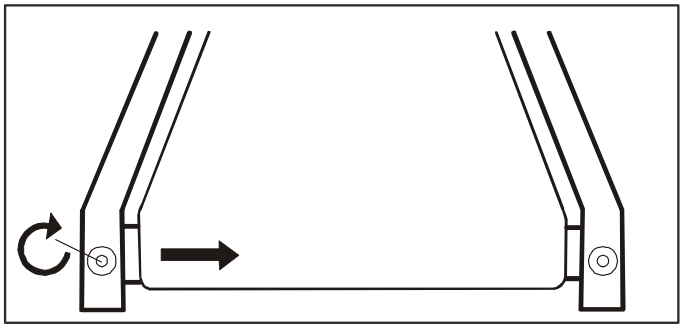
TREADBELT TRACKING ADJUSTMENT:

The performance of your treadmill is dependent on the frame running on a reasonably level surface. If the frame is not level, the front and back roller cannot run parallel, and constant belt adjustment may be necessary.

The treadmill is designed to keep the tread-belt reasonably centered while in use. It is normal for some belts to drift near one side while the belt is running with no one on it. After a few minutes of use, the tread-belt should have a tendency to center itself. If, during use, the belt continues to move toward one side, adjustments are necessary.

TO SET TREADBELT TRACKING:

A 10 mm Allen wrench is provided to adjust the rear roller. Make tracking adjustments from the **left** side only. Set belt speed at approximately 3 to 5 kph.



Remember, a small adjustment can make a dramatic difference!

Turn the bolt clockwise to move the belt to the right. Turn the bolt only a 1/4 turn and wait a few minutes for the belt to adjust itself. Continue to make 1/4 rotation turns until the belt stabilizes in the center of the running deck.

The belt may require periodic tracking adjustment depending on use and walking/running characteristics. Some users will affect tracking differently. Expect to make adjustments as required to center the tread-belt. Adjustments will become less of a maintenance concern as the belt is used. Proper belt tracking is an owner responsibility common with all treadmills.

ATTENTION:
DAMAGE TO THE RUNNING BELT RESULTING FROM IMPROPER TRACKING / TENSION ADJUSTMENTS IS NOT COVERED UNDER THE SPIRIT WARRANTY.

Service Checklist - Diagnosis Guide

Before contacting your dealer for aid, please review the following information. It may save you both time and expense. This list includes common problems that may not be covered under the treadmill's warranty.

PROBLEM	SOLUTION/CAUSE
Display does not light	1) Tether cord not in position. 2) Circuit breaker on front grill tripped. Push circuit breaker in until it locks. 3) Plug is disconnected. Make sure plug is firmly pushed into 220 VAC wall outlet. 4) Breaker panel circuit breaker may be tripped. 5) Treadmill defect. Contact your SPIRIT dealer.
Tread-belt does not stay centered	The user may be walking while favoring or putting more weight on either the left or right foot. If this walking pattern is natural, track the belt slightly off-center to the side opposite from the belt movement.
Treadmill belt hesitates when walked/run on	See General Maintenance section on Tread-belt Tension. Motor drive belt may be loose.
Motor is not responsive after pressing start	1) If the belt moves, but stops after a short time and the display shows"Low Speed", run calibration (See procedure on next page). 2) If you press start and the belt **never** moves, then the display shows LS, contact service.
Treadmill will only achieve approximately 10 kph but shows higher speed on display	This indicates motor should be receiving power to operate. Low AC voltage to treadmill. Do not use an extension cord. If an extension cord is required it should be as short as possible and heavy duty 16 gauge minimum. Low household voltage. Contact an electrician or your SPIRIT dealer. A minimum of 220 volt AC current, 50 hz is required.
Treadmill trips on board 15 amp circuit	High belt/deck friction. See General Maintenance section.
Computer shuts off when console is touched (on a cold day) while walking/running	Treadmill may not be grounded. Static electricity is "crashing" the computer. Refer to Grounding Instructions on page 3.
House circuit breaker trips, but not the treadmill circuit breaker.	Need to replace the house breaker with a "High inrush current" type breaker (see page 3 for details)

Calibration procedure:

1) Remove the safety key
2) Press and hold down the **INCLINE** and **SPEED** buttons with one hand and replace the safety key with the other. Continue to hold both keys until the window displays **"FACTORY SETTING",** then press the **ENTER** key.
3) You will now be able to set the display to show Metric or English settings. To do this, press **UP/DOWN or FAST/SLOW** keys to show which you want, then press **ENTER**.
4) Make sure the wheel size diameter is 2.98 then press **ENTER.**
5) Adjust the maximum speed (if needed) to 20.0kph or **12.0** mph and then press **ENTER.**
6) Adjust the minimum speed (if needed) to 0.8kph or 0.5 mph and then press **ENTER.**
7) Message Windows will show "INCLINE STEPS ". Adjust the maximum elevation (if needed) to 15 and then press **ENTER.**
8) Message Windows will show "CALIBRATION ON". Press **START** to begin calibration. The process is automatic; the speed will start up without warning, so do not stand on the belt. After finishing calibration, it automatically returns to IDLE MODE.

Adjusting the speed sensor:

If the calibration does not pass you may need to check the speed sensor alignment.

1) Release motor cover screws (screws are not necessarily taken apart) and remove the motor cover hood.
2) The speed sensor is located on the left side of the frame, right next to the front roller pulley (the pulley will have a belt around it that also goes to the motor). The speed sensor is small and black square with a wire connected to it.
3) Make sure the sensor is as close as possible to the pulley without touching it. You will see a magnet on the face of the pulley; make sure the sensor is aligned with the magnet. There is a screw that holds the sensor in place that needs to be loosened to adjust the sensor. Re-tighten the screw when finished.

Resetting cumulated distance and time (DIAGNOSTICS PROCESS):

1) Remove the safety key and press numeric key **0** and **ENTER** then return the safety key to enter displaying the version of cumulated distance and time. Total time is shown on window TIME while total mileage and software version on window MW.
2) To clear the value, press numeric keys **7 → 8 → 9 → 7** hen press **ENTER** key to reset total mileage and time to zero.
3) Press **STOP** key to exit and return idle mode.

Maintenance menu:

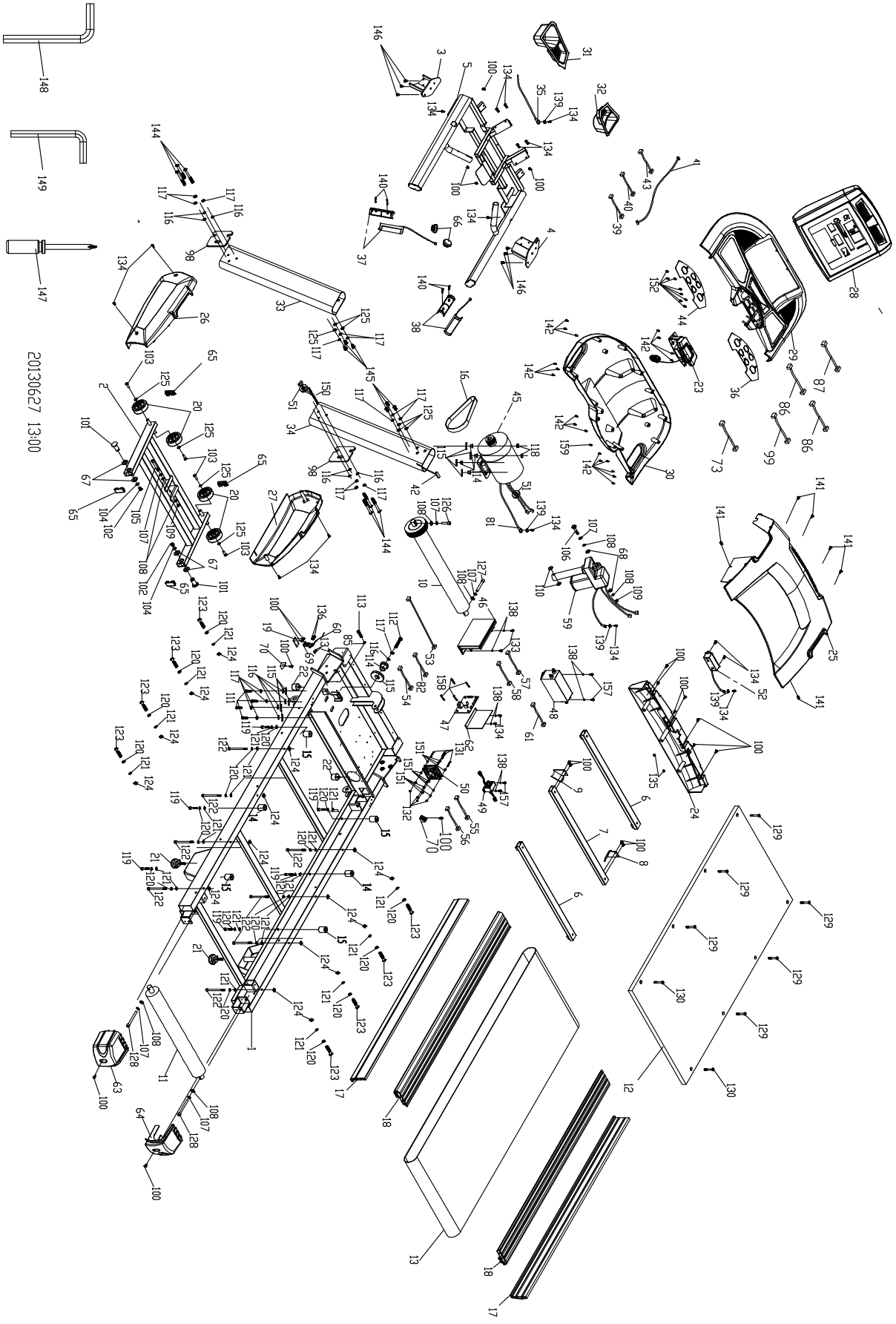
1) Remove the safety key and press **SPEED** and **ENTER** keys at the same time then return the safety key until “ENGINEERING MODE” is displayed, press **ENTER** again.
2) You can now scroll through the menu using the **UP /DOWN or FAST/SLOW** keys. Use the **ENTER** key to run. Use the **STOP** key to return to previous menu selection. The menu selections are:

   1) **Key Test –** Press each key to verify it is functioning correctly. Press **ENTER** key to run.
   2) **Display test -** Lights all LED lights. Press **ENTER** key to run.
   3) **Functions (Press ENTER key into this function)**
      i. **Sleep -** Turns sleep mode on or off. When off, display is always lit.
      ii. **Pause -** Turns pause mode on or off. When on, Pause lasts 5 minutes.
      iii. **Maintenance –** Reset odometer reading.
      iv. **Units -** Set display to English or Metric readings
      v. **Grade Return (GS Mode) -** Returns the elevation to lowest setting when pause is pressed
      vi. **Beep –** Turns the speaker (beep sound) on or off.
   4) **Security –**Sets the Child Lock function. This function locks out the keypad until a pre-determined key sequence is pressed. When “Child Lock” is on, at the time power is on and before idle mode, MW will displays “**CONSOLE LOCKED**” you must press numeric key 0 and Enter at the same time to unlock console and return to idle mode.
   5) Press **STOP** key to exit and return idle mode.

Setting mileage lock:

1) Remove the safety key, press and hold numeric keys **1, 2, 3** at the same time then return the safety key to enter setting function.
2) Message window will display “**LOCK SETTING = ON/OFF**”.
3) Press **FAST/SLOW/UP/DOWN** keys to set On or Off then press **ENTER.**
4) If Off is set, it returns to idle mode. If On is set, it enters code setting procedure.
5) Now message window will display “**PASSWORD= ∗∗∗∗**”. Use numeric keys in order to set a 4-digit security code. Press **ENTER** when complete.
6) Enter the code again to confirm. Press **Enter** when complete.
7) Now message window will show “**MILEAGE XXX Km**”. Use **UP/DOWN or FAST/SLOW** keys to set the required mileage. Press **ENTER** r when complete. Now MW window will show “**Lock Setting OK**” and return to idle mode.
8) To unlock, press and hold numeric keys 1, 2, 3 at the same time to enter unlocking function.

EXPLODED VIEW DIAGRAM



PARTS LIST

Part Number	Part Description	Qty per unit
1	Main Frame	1
2	Incline Bracket	1
3	Interface Mounting Bracket, Left	1
4	Interface Mounting Bracket, Right	1
5	Console Support	1
6	Deck Cross Brace A	2
7	Deck Cross Brace B	1
8	Belt Guide Right	1
9	Belt Guide Left	1
10	Front Roller Assembly W/Pulley	1
11	Rear Roller Assembly	1
12	Running Deck	1
13	Running Belt	1
14	Cushion A	2
15	Cushion B	4
16	Motor Drive Belt	1
17	122 × 39 × 1390m/m_Aluminum Step Rail	2
18	125 × 29 × 1390m/m_Aluminum Step Rail	2
19	Hall Sensor Mounting Bracket	1
20	Transportation Wheel	4
21	Leveling Glide	2
22	Rubber Stop, Incline	2
23	Emergency Switch	1
24	Front Cover	1
25	Motor Top Cover	1
26	Motor Base Cap (L)	1
27	Motor Base Cap (R)	1
28	Console Assembly	1
29	Console Top Cover	1
30	Console Bottom Cover	1
31	Beverage Holder (L)	1
32	Beverage Holder (R)	1
33	Left Upright	1
34	Right Upright	1
35	Ground Wire	1
36	Touch-Pad-Button Board	1
37	900m/m_Handpulse W/Cable Assembly A	1
38	900m/m_Handpulse W/Cable Assembly B	1
39	Handpulse Wire (Upper)	1
40	Handpulse Wire (Lower)	1
41	700m/m_Computer Cable (Upper)	1
42	1700m/m_Computer Cable (Lower)	1

Part Number	Part Description	Qty per unit
43	700m/m_Pad/Backlit Cable	1
44	Toggle switch Key Board	1
45	AC Motor	1
46	Inverter	1
47	Incline Interface Board	1
48	Filter	1
49	Choke	1
50	Motor Compartment Fan	1
51	O ring for eliminate magnet	2
52	A.C. Input Module	1
53	450m/m_Connecting Wire, White	1
54	450m/m_Connecting Wire, Black	1
55	300m/m_Motor Compartment Fan Wire, Black	1
56	300m/m_Motor Compartment Fan wire, White	1
57	300m/m_Connecing Wire, Inverter Power Cord (White)	1
58	300m/m_Connecing Wire, Inverter Power Cord (Black)	1
59	Incline Motor	1
60	Sensor W/Cable	1
61	RS485 Cable	1
62	Control L Bracket	1
63	Rear Roller End Cap, Left	1
64	Rear Roller End Cap, Right	1
65	□25 × 50m/m_Square End Cap	4
66	Round End Cap	2
67	Incline Carriage Spacer	4
68	Ø10 × Ø25 × 0.8T_Nylon Washer	2
69	Sensor Rack	1
70	Motor Cover Anchor	2
73	400m/m_Audio Cable	1
81	300m/m_Motor Ground Wire	1
82	450m/m_Connecting Wire(White)	1
85	Speaker End Cap	1
86	400m/m_Speaker W/Cable	2
87	500m/m_Ground Wire	1
98	Foam Pad	2
99	Power Line Cord	1
100	5 × 20m/m_Tapping Screw	21
101	Ø18 × Ø19 × 41L_Carriage Bolt	2
102	M8 × 1.25 × 12L_Hex Head Bolt	2
103	3/8"-16 × 25L_Hex Head Bolt	4
104	Ø8.5 × 26 × 2.0T_Flat Washer	2
105	M10 × 65L Hex Head Bolt	1
106	M10 × 50LHex Head Bolt	1
107	Ø10 × 1.5T_Split Washer	6
108	Ø10 × Ø19 × 1.5T_Flat Washer	8
109	M10 × 8.0T_Nyloc Nut	2
110	Ø10 × Ø24 × 2T_Nylon Washer	2
111	3/8"-16 × 1-1/2"_Socket Head Cap Bolt	4

Part Number	Part Description	Qty per unit
112	3/8" × 2-1/2" Hex Head Bolt	1
113	3/8"-16 × 2" Socket Head Cap Bolt	1
114	Ø10 × Ø14 × 14L Isolation Bushing	5
115	13 × 35 × 5T_Nylon Washer	9
116	Ø3/8" × 35 × 2T_Flat Washer	11
117	3/8" × 16.5 × 2.0T × 4H Split Washer	17
118	3/8" × 7T_Nyloc Nut	2
119	M8 × 1.25 × 40L Socket Head Cap Bolt	6
120	Ø8 × 1.5T_Split Washer	22
121	Ø8 × 16 × 1T_Flat Washer	22
122	M8 × 1.25 × 90LSocket Head Cap Bolt	8
123	M8 × 1.25 × 55L_Hex Head Bolt	8
124	M8 × 1.25 × 6.5T_Nut	16
125	Ø3/8" × 25 × 2T Flat Washer	10
126	M10 × 1.5 × 40L_Socket Head Cap Bolt	1
127	M10 × 1.5 × 80L_Socket Head Cap Bolt	1
128	M10 × 1.5 × 100L_Socket Head Cap Bolt	2
129	M8 × 1.25 × 55L_Flat Head Countersink Bolt	6
130	M8 × 1.25 × 35L_Flat Head Countersink Bolt	2
131	3 × 50L_Phillips Head Screw	4
132	3 × 5T Nyloc Nut	4
133	M5 × 20L_Phillips Head Screw	2
134	M5 × 12L Phillips Head Screw	18
135	M5_Nyloc Nut	2
136	3.5 × 12L_Tapping Screw	2
137	M5 × 1.5T_Tapping Screw	2
138	M5 × 1.5T_Split Washer	8
139	M5_Star Washer	4
140	3 × 20L Tapping Screw	4
141	M5 × 12L_Tapping Screw	6
142	3.5 × 12L_Sheet Metal Screw	19
144	3/8"-16 × 3"_Button Head Socket Bolt	6
145	3/8"-16 × 3/4"_Button Head Socket Bolt	6
146	M8 × 1.25 × 12L_Socket Head Cap Bolt	6
147	Phillips Head Screw Driver	1
148	8m/m L Allen Wrench	1
149	3/8" L Allen Wrench	1
150	Ending Tape	1
151	Isolation Pad	12
152	2.3 × 6L_Sheet Metal Screw	8
157	M5 × 12L_Phillips Head Screw	4
158	M3 × 10L_Phillips Head Screw	4
159	3 × 10L_Sheet Metal Screw	1